Claims

1. Method for the production of a permanent human amniocytic cell line comprising:
   a) Transfecting primary human amniocytic cells with a nucleic acid molecule comprising a nucleic acid sequence encoding the adenoviral gene products E1A and E1B and
   b) subsequently transfecting the permanent human amniocytic cell line obtained in step a) with a nucleic acid molecule comprising a nucleic acid sequence encoding the SV40 large T-antigen or the Epstein-Barr virus (EBV) nuclear antigen 1 (EBNA-1).

2. The method according to claim 1, wherein the nucleic acid sequence encoding the adenoviral gene functions E1A and E1B is derived from a human adenovirus, in particular of the human adenovirus serotype 5.

3. The method according to claim 2, wherein the nucleic acid sequence encoding the adenoviral gene products E1A and E1B comprises the nucleotides 1 to 4344, 505 to 3522 or the nucleotides 505 to 4079 of the human adenovirus serotype 5.

4. The method according to claim 1, wherein the nucleic acid sequence encoding the SV40 large T-antigen further comprises a nucleic acid sequence for a promoter selected from the group of CMV promoter, CAG promoter and RSV promoter, the nucleic acid sequence for SV40 SD/SA (intron) and the nucleic acid sequence for SV40 polyA and the nucleic acid sequence for the Epstein-Barr virus (EBV) nuclear antigen 1 (EBNA-1) further comprises the nucleic acid sequence for a promoter selected from the groups of CMV promoter, CAG promoter und RSV promoter, the nucleic acid sequence for SV40 SD/SA (intron) and the nucleic acid sequence for SV40 polyA.

5. The method according to any one of the preceding claims, wherein instead of step a) already immortalized human amniocytic cell lines are used.

6. A permanent human amniocytic cell line obtained by the method according to any one of the preceding claims.

7. Method for transient expression of recombinant polypeptides and proteins by use of a permanent human amniocytic cell line according to claim 6, said method comprises the steps of:

a) Transfecting said permanent human amniocytic cell line with a nucleic acid molecule comprising a nucleic acid sequence encoding a desired recombinant polypeptide or protein and a recognition or binding site for SV40 large T-antigen or the Epstein-Barr virus (EBV) nuclear antigen 1 (EBNA-1),

b) Culturing the transfected permanent human amniocytic cell line obtained in step a) under conditions allowing the expression of said desired recombinant polypeptide or protein, and subsequently

c) Isolating said desired recombinant polypeptide or protein from the cells or from the culture supernatant.

8. The method according to claim 7, wherein the recombinant polypeptide or protein is a hormone, a plasma factor, a blood clotting factor, a growth factor, a cellular receptor, a fusion protein, a Coxsackie and adenovirus receptor (CAR), an antibody, a viral, bacterial or parasitic antigen or complement factors for the production of recombinant viruses.

9. Use of the cells according to claim 6 for the production of a polypeptide or protein.

~~10. Polypeptide or protein obtainable by a method according to any one of claims 7 or 8.~~

Claims

1. Method for the production of a permanent human amniocytic cell line comprising:
   a) Transfecting primary human amniocytic cells with a nucleic acid molecule comprising a nucleic acid sequence encoding the adenoviral gene products E1A and E1B and
   b) subsequently transfecting the permanent human amniocytic cell line obtained in step a) with a nucleic acid molecule comprising a nucleic acid sequence encoding the SV40 large T-antigen or the Epstein-Barr virus (EBV) nuclear antigen 1 (EBNA-1).

2. The method according to claim 1, wherein the nucleic acid sequence encoding the adenoviral gene functions E1A and E1B is derived from a human adenovirus, in particular of the human adenovirus serotype 5.

3. The method according to claim 2, wherein the nucleic acid sequence encoding the adenoviral gene products E1A and E1B comprises the nucleotides 1 to 4344, 505 to 3522 or the nucleotides 505 to 4079 of the human adenovirus serotype 5.

4. The method according to claim 1, wherein the nucleic acid sequence encoding the SV40 large T-antigen further comprises a nucleic acid sequence for a promoter selected from the group of CMV promoter, CAG promoter and RSV promoter, the nucleic acid sequence for SV40 SD/SA (intron) and the nucleic acid sequence for SV40 polyA and the nucleic acid sequence for the Epstein-Barr virus (EBV) nuclear antigen 1 (EBNA-1) further comprises the nucleic acid sequence for a promoter selected from the groups of CMV promoter, CAG promoter und RSV promoter, the nucleic acid sequence for SV40 SD/SA (intron) and the nucleic acid sequence for SV40 polyA.

5. The method according to any one of the preceding claims, wherein instead of step a) already immortalized human amniocytic cell lines are used.

6. A permanent human amniocytic cell line obtained by the method according to any one of the preceding claims.

7. Method for transient expression of recombinant polypeptides and proteins by use of a permanent human amniocytic cell line according to claim 6, said method comprises the steps of:

   a) Transfecting said permanent human amniocytic cell line with a nucleic acid molecule comprising a nucleic acid sequence encoding a desired recombinant polypeptide or protein and a recognition or binding site for SV40 large T-antigen or the Epstein-Barr virus (EBV) nuclear antigen 1 (EBNA-1),

   b) Culturing the transfected permanent human amniocytic cell line obtained in step a) under conditions allowing the expression of said desired recombinant polypeptide or protein, and subsequently

   c) Isolating said desired recombinant polypeptide or protein from the cells or from the culture supernatant.

8. The method according to claim 7, wherein the recombinant polypeptide or protein is a hormone, a plasma factor, a blood clotting factor, a growth factor, a cellular receptor, a fusion protein, a Coxsackie and adenovirus receptor (CAR), an antibody, a viral, bacterial or parasitic antigen or complement factors for the production of recombinant viruses.

9. Use of the cells according to claim 6 for the production of a polypeptide or protein.